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A quick guide to positioning the transbuccal set

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Abstract: Exact positioning of the transbuccal set can be tricky, especially under aggravating circumstances as present scarring or high body mass index. It may result in multiple skin incisions. This article presents a simple and fast guidance technique that can help in the exact positioning of skin incision and transbuccal set.

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Title Page

A quick guide for positioning the transbuccal set

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Especially amongst younger and therefore less experienced surgeons positioning of the incision for the transbuccal approach is an issue. The struggle arises from incorrect judgment. A high body mass index or scarring from prior surgery may additionally reduce soft-tissue flexibility and worsen the situation. The resulting necessity of high pulling forces can result in massive postoperative swelling and - depending on the exact location of the approach - sometimes also in transient weakness of facial nerve branches. The need of strong pulling force also reduces the surgeon's manual control, risking screw loss or malposition. However in specific situations exact screw positioning is essential to the outcome of the procedure.^{1, 2}

Commonly known guidance "tricks" as using the index finger and thumb³ or utilizing a surgical forceps⁴ provide only information about where to perform the skin incision, not about the necessary trajectory of the set. However in our experience this is an important factor especially in patients with reduced soft tissue flexibility as described above.

As a solution, we recommend using a thin needle (Figure 1) as described before.⁵ In addition to the initial description by Sittampalam et al. we do not only address the position of the skin incision but also check the trajectory. It can also be checked whether all desired locations are reached by varying the trajectory with one single skin incision. The best position can easily be found.

We recommend using the "needle technique" for situations such as long plates or procedures for the condylar process, as well as for less experienced surgeons in general. The extra time needed for placing the needle is short and costs are obviously negligible.

CONFLICT OF INTEREST

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CAPTION

Figure 1. Exact definition of the ideal trajectory for the transbuccal set

